

Current Status of All Claims in the Application:

1-19. (Canceled)

20. (Currently Amended) A circulation system for a mover that includes a first inlet and a second inlet, the circulation system comprising:

a fluid source that directs a first fluid into the first inlet and a second fluid into the second inlet, the fluid source including a first conduit that transports the first fluid toward the first inlet and a second conduit that transports the second fluid toward the second inlet, wherein at least a portion of the second conduit is encircled by the first conduit.

21. (Original) The circulation system of claim 20 wherein a temperature of the second fluid at the second inlet is different than a temperature of the first fluid at the first inlet.

22. (Original) The circulation system of claim 21 wherein the temperature of the first fluid at the first inlet is at least approximately 5 degrees C greater than the temperature of the second fluid at the second inlet.

23. (Original) The circulation system of claim 21 wherein the temperature of the first fluid at the first inlet is at least approximately 10 degrees C greater than the temperature of the second fluid at the second inlet.

24. (Original) The circulation system of claim 20 wherein at least approximately 10 percent of the second conduit is encircled by the first conduit.

25. (Original) The circulation system of claim 20 wherein at least approximately 50 percent of the second conduit is encircled by the first conduit.

26. (Original) A mover combination comprising (i) a mover having a magnet component and a conductor component and (ii) the circulation system of claim 20.

27. (Original) The mover combination of claim 26 wherein the mover is positioned in a room that is at a room temperature, and wherein a temperature of the first fluid at the first inlet is approximately equal to the room temperature.

28. (Original) The mover combination of claim 26 wherein the mover includes a first passageway and a second passageway, wherein the first inlet is in fluid communication with the first passageway and the second inlet is in fluid communication with the second passageway.

29. (Original) The mover combination of claim 28 wherein the first passageway encircles at least a portion of the second passageway.

30. (Original) The mover combination of claim 29 wherein the conductor component includes a conductor array and wherein the first passageway encircles at least a portion of the conductor array and the conductor array encircles at least a portion of the second passageway.

31. (Original) An isolation system including the mover combination of claim 26.

32. (Original) A stage assembly including the mover combination of claim 26.

33. (Original) An exposure apparatus including the mover combination of claim 26.

34. (Original) An object on which an image has been formed by the exposure apparatus of claim 33.

35. (Original) A semiconductor wafer on which an image has been formed by the exposure apparatus of claim 33.

36. (Currently Amended) A method for controlling the temperature of a mover combination, ~~the mover including a first inlet and a second inlet~~, the method comprising the steps of:

providing a mover having a first inlet, a second inlet, a conductor component and a magnet component;

directing a first fluid from a fluid source into the first inlet; ~~and~~

directing a second fluid from the fluid source into the second inlet;

controlling a temperature of the first fluid at the first inlet with a first temperature adjuster;

controlling a temperature of the second fluid at the second inlet with a second temperature adjuster, wherein ~~[[a]]~~ the temperature of the second fluid at the second inlet is different than ~~[[a]]~~ the temperature of the first fluid at the first inlet.

37. (Original) The method of claim 36 wherein the temperature of the first fluid at the first inlet is at least approximately 2 degrees greater than the temperature of the second fluid at the second inlet.

38. (Original) The method of claim 36 wherein the temperature of the first fluid at the first inlet is at least approximately 5 degrees greater than the temperature of the second fluid at the second inlet.

39. (Original) The method of claim 36 wherein the temperature of the first fluid at the first inlet is at least approximately 10 degrees greater than the temperature of the second fluid at the second inlet.

40. (Canceled)

41. (Currently Amended) The method of claim 40 36 wherein the mover is positioned in a room that is at a room temperature, and wherein the temperature of the first fluid at the first inlet is approximately equal to the room temperature.

42. (Currently Amended) The method of claim 40 36 wherein the mover includes a first passageway and a second passageway, wherein the first inlet is in fluid communication with the first passageway and the second inlet is in fluid communication with the second passageway.

43. (Original) The method of claim 42 wherein the first passageway encircles at least a portion of the second passageway.

44. (Currently Amended) The method of claim 40 36 wherein the fluid source includes a first conduit that transports the first fluid and a second conduit that transports the second fluid, and wherein at least a portion of the first conduit encircles the second conduit.

45. (Original) A method for making an isolation system comprising the steps of providing an mover and circulation of the fluids around the mover pursuant to the method of claim 36.

46. (Currently Amended) A method for making a stage assembly comprising the steps of providing ~~an mover that moves a stage, moving the stage with the mover,~~ and ~~circulation of~~ circulating the fluids around the mover pursuant to the method of claim 36.

47. (Currently Amended) A method for making an exposure apparatus comprising the steps of providing an illumination system and a stage assembly made by the method of claim 46 ~~mover and circulation of the fluids around the mover pursuant to the method of claim 36.~~

48. (Original) A method of making a wafer utilizing the exposure apparatus made by the method of claim 47.

49. (Original) A method of making a device utilizing the exposure apparatus made by the method of claim 47.

50. (New) A mover combination comprising:

a mover having a magnet component, a conductor component including a conductor array, a first passageway including a first inlet, and a second passageway including a second inlet, wherein the first passageway encircles at least a portion of the conductor array and the conductor array encircles at least a portion of the second passageway; and

a circulation system including a fluid source that directs a first fluid to the first inlet and a second fluid to the second inlet, wherein a temperature of the first fluid at the first inlet is different than a temperature of the second fluid at the second inlet, and wherein the first inlet is in fluid communication with the first passageway and the second inlet is in fluid communication with the second passageway.

51. (New) The mover combination of claim 50 wherein the circulation housing cooperates with the conductor component to define the first passageway.

52. (New) The mover combination of claim 50 wherein the second passageway is formed by an opening in the conductor component.

53. (New) The mover combination of claim 50 wherein the first passageway and the second passageway are substantially coaxial.

54. (New) The mover combination of claim 50 wherein the first passageway is not in fluid communication with the second passageway.

55. (New) The mover combination of claim 50 wherein the temperature of the first fluid and the temperature of the second fluid are controlled to precisely control a temperature of an outer surface of the conductor component.

56. (New) The mover combination of claim 50 wherein the fluid source includes a first conduit that transports the first fluid to the first inlet and a second conduit that transports the second fluid to the second inlet, wherein at least a portion of the second conduit is encircled by the first conduit, and wherein the first conduit and the second conduit are substantially coaxial.

57. (New) A mover combination comprising:

a mover including a first inlet, a second inlet, a conductor component and a magnet component; and

a circulation system including: (i) a fluid source that directs a first fluid to the first inlet and a second fluid to the second inlet; (ii) a first temperature adjuster that controls a temperature of the first fluid at the first inlet; and (iii) a second temperature adjuster that controls a temperature of the second fluid at the second inlet so that the second fluid at the second inlet is different than the temperature of the first fluid at the first inlet.

58. (New) The mover combination of claim 57 wherein the second fluid cools the conductor component.

59. (New) The mover combination of claim 57 wherein the mover includes a first passageway and a second passageway, wherein the first inlet is in fluid communication with the first passageway and the second inlet is in fluid communication with the second passageway, and wherein the first passageway encircles at least a portion of the second passageway.

60. (New) The mover combination of claim 57 wherein the first passageway is not in fluid communication with the second passageway.

61. (New) The mover combination of claim 57 wherein the first passageway encircles at least a portion of the second passageway and wherein at least one of the first passageway and the second passageway encircles at least a portion of the conductor component.

62. (New) The mover combination of claim 57 wherein the first fluid source includes a first conduit that transports the first fluid to the first inlet and a second conduit that transports the second fluid to the second inlet, wherein at least a portion of the first conduit encircles the second conduit.

63. (New) An isolation system including the mover combination of claim 57.

64. (New) A stage assembly including the mover combination of claim 57.

65. (New) An exposure apparatus including the mover combination of claim 57.

66. (New) A method for making an object including the steps of providing a substrate and transferring an image to the substrate with the exposure apparatus of claim 65.

67. (New) A method for making a semiconductor wafer including the steps of providing a substrate and transferring an image to the substrate with the exposure apparatus of claim 65.

68. (New) A mover combination comprising:

a mover including a conductor component, a magnet component, a first passageway having a first inlet, and a second passageway having a second inlet, wherein the first passageway encircles at least a portion of the second passageway and wherein at least one of the first passageway and the second passageway encircles at least a portion of the conductor component; and

a circulation system including a fluid source that directs a first fluid to the first inlet and a second fluid to the second inlet, wherein a temperature of the first fluid at the first inlet is different than a temperature of the second fluid at the second inlet.

69. (New) The mover combination of claim 68 wherein both the first passageway and the second passageway encircle at least a portion of the conductor component.

70. (New) The mover combination of claim 68 wherein the first passageway and the second passageway are substantially coaxial.

71 (New) The mover combination of claim 68 wherein the first passageway is not in fluid communication with the second passageway.